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## Recreation Site Analysis

# 5-Year Recreation Facility Strategy

for Recreation Sites and  
Programmatic Effects of  
Implementation



Forest  
Service

Shawnee  
National Forest

# **Recreation Site Analysis**

# **5-year Recreation**

# **Facility Strategy**



**Shawnee National Forest**

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## Executive Summary

The purpose of Recreation Site Analysis (RSA) is to create a 5-year Recreation Facility Strategy (RFS) for recreation sites to contribute to sustainability on the Shawnee National Forest (Shawnee). RSA is an evolution of Recreation Facility Analysis (RFA) which was completed on the Shawnee in 2008. While the goals of RFA such as operating and maintaining sites to standard and reducing deferred maintenance costs are still valid, RSA broadens these goals to consider how recreation sites contribute to social stability, environmental integrity, and economic vitality of the forest and its communities.

This 5-year RFS serves as a framework and advisory document from which the Shawnee will prioritize investments, as well as pursue changes in operations or maintenance of developed recreation sites and facilities. Proposals are consistent with the Framework for Sustainable Recreation and the 2006 Shawnee Land and Resource Management Plan. However, not all actions recommended in this RFS will be accomplished during the 5-year timeframe due to funding and capacity limitations.

### **A. Background**

The Shawnee is a small forest in rural southern Illinois. While populations in the immediate vicinity are relatively low, the forest is within a one-day drive of several large cities: St. Louis, MO, Louisville, KY, Nashville, TN, Indianapolis, IN, and Chicago, IL. Recreation has long been a significant program for the Shawnee. Most of the recreation facilities on the forest were constructed between 1960 and 1980 and are now approaching or beyond their expected service life, resulting in ever growing maintenance and major repair needs. Over this time, the recreation opportunities that the public seeks have also shifted. These factors have influenced the past recreation analyses completed for the Shawnee.

The 2008 RFA identified a need to reduce facilities. Between 2008 and 2012, several campgrounds had a reduction in size and/or amenities or were even completely closed and decommissioned. Other recreation sites were also closed or diminished. These were difficult decisions but have resulted in a smaller, more manageable recreation program, suitable to current budget and staffing levels and more appropriate to the levels of visitation on the forest. The 2008 RFA noted the growing concern of deferred maintenance (DM) due to aging infrastructure and the need for significant investment to address it in the future, though immediate DM reductions were focused on the decommissioning projects.

Currently the Shawnee maintains 101 developed recreation sites, ranging from simple trailheads to a large concessionaire-operated campground. This is only a portion of a multifaceted recreation program that also manages over 450 miles of designated trails, backcountry recreation opportunities including seven Congressionally-designated wilderness areas, an average of 12 recreation event permits annually and 20 outfitter/guide permits, a complex heritage program, and active conservation education and outreach programs. Ensuring a right-sized developed



recreation program and addressing the age-related decline of many of the structures is essential to continuing the successful operation of all of these programs.

## **B. Recreation Facility Strategy Summary**

### **Recreation Sites Prioritization Report**

The central feature of the RFS is the table of projects proposed for completion in the next five years. **Table 11** on page 23 identifies the tasks proposed in this strategy by recreation site, estimated cost, and planned implementation date. Implementation costs – for those projects proposed for funding out of the Shawnee annual allocation – are projected out to 2025 for a total of \$357,000. This implementation cost is more than the recommended onetime cost for a 5-year plan by approximately \$7,000, though this overage is probably not significant given the use of estimates and rounding. The recommended onetime cost is the amount of money available annually plus any annual fee collections, if available.

In addition to the projects included in the \$357,000, the Shawnee has identified investment priority projects that will require funding from sources other than the forest's allocated dollars and fee collections (identified in the "comments" column). These projects are specifically focused on major repairs and replacements of aging infrastructure and will decrease deferred maintenance significantly, as well as increasing the expected service life of the facilities. The total estimated dollars needed for these investment priorities is \$2.4 million, and the proposed management actions requiring external funding will only be implemented if alternative funding sources become available. See Appendix E for more details. If funding cannot be obtained for these investment priority projects, it is likely that the next RSA process will find decommissioning to be the only solution to growing maintenance problems with certain recreation sites, such as Lake Glendale Recreation Area.

### **Allocation & Revenue Vs. Operations & Maintenance**

The analysis suggests that given current allocations and fee revenue, the forest can *operate* all 101 sites to regionally required standards with the annual NFRW allocation and fees that are available. However, the analysis also suggests that the forest can *maintain* only 19 sites with the annual CMFC allocation and fees that are available. Overall there is no NFRW deficit, but there is a \$72,200 CMFC deficit. Approximately \$29,195 in current annual fee revenue can be applied to the operations and maintenance of fee sites. The surplus from NFRW of approximately \$72,000 could be reprogrammed to assist with the CMFC deficit, which will allow the forest to address routine operations and maintenance with the annual allocations and fees that are currently available. Proposed new recreation site fees (see below) would increase revenue available for operations and maintenance of those fee sites, allowing NFRW and CMFC to be reprogrammed to non-fee sites. This increases the number of recreation sites that the forest can maintain with the annual CMFC allocation and fees from 19 to 42 sites. See Appendix D for these two reports.

### **Creating a More Sustainable Recreation Site Program**

Although the average allocation and fee revenue for the Shawnee in recent years will cover expected operations and maintenance costs for its recreation sites, there is little residual funding to address deferred maintenance items or unforeseen damage. We expect that recreation funding

is likely to continue to decline while inflation raises costs, and we know that the aging infrastructure will require replacement or at least major refurbishment in the near future. The Shawnee strategy for its recreation facilities includes multiple steps to address this shortfall and improve program sustainability:

- Continue to make small scale repairs/replacements as possible with allocated funds and force account efforts.
- Propose new fees for the most-developed day use sites to provide revenue for major repairs and replacements of infrastructure
- Investigate new partners to take over operations and/or maintenance of certain sites
- Continue to apply for outside funding sources such as Capital Improvement Project funding to allow for major refurbishment projects to eliminate DM and decrease annual maintenance costs.

## 1. Introduction

### A. Sustainable Recreation Overview

In 2010, the Forest Service issued new strategic direction for the recreation program called a “Framework for Sustainable Recreation.” In 2012, the Forest Service Planning Rule defined sustainable recreation as “*The set of recreation settings and opportunities on the National Forest System that is ecologically, economically, and socially sustainable for present and future generations.*” This definition recognizes the role the recreation program plays in supporting the overall Forest Service mission of sustainability. Sustainability is only possible when recreation is integrated with all other agency programs. Similarly, national forests are vital to the sustainability of many rural and urban communities. Recreation is the portal through which people connect to their national forests. Thus, national forest recreation plays a key role in the social stability, environmental integrity, and economic vitality of these communities.

The core of sustainable recreation is three fundamental shifts in how we view and deliver our recreation and tourism program as public land managers:

1. Sustainability is the lens through which we make ALL decisions. We will not invest if we cannot sustain.
2. We view our work and build our programs from an integrated forest and community perspective. We approach the community table not as managers with answers, but as community participants with questions and expertise.
3. We are conveners and facilitators in recreation management and our skill set contributes to maintaining a thorough network of relationships, partnerships and citizen stewards. We bring our expertise to help others become active participants in land stewardship.

To progress toward our ultimate goal – sustainability – we need to effectively assess what “recreation’s contribution to sustainability” means. This requires crafting realistic strategies that align the organization toward that goal and adopting performance measures and progress indicators that hold us accountable to our mission.

Implementing sustainable recreation is about incorporating sustainability into the work we do every day. Incorporating sustainability into recreation program management requires us to make choices about what to say yes and no to. We often find that it's easy to say yes, particularly when a partner has funding to support a project. But having funding does not mean that the project contributes to sustainability or the overall goals of the recreation program. Being able to know when to say "no" or "yes, if" is important to managing for sustainability.

## **B. Recreation Facility Strategy (RFS) Overview**

This document is a living, working road map to guide the Shawnee National Forest (Shawnee) in providing a quality, sustainable developed recreation program. It describes the vision (niche) for the overall Forest recreation program and outlines proposals specific to individual developed recreation sites.

The proposals and guidance contained in this document considered:

- existing and projected visitor demands
- resource conditions
- program costs, allocations, and revenue

This document will serve as a framework from which the Shawnee will prioritize investments, as well as pursue changes in operations or maintenance of developed recreation sites and facilities. It is possible, however, that not all projects proposed here will be completed within the five-year period due to budget and capacity constraints. Proposals are consistent with the Framework for Sustainable Recreation and the 2006 Shawnee Land and Resource Management Plan.

The Shawnee recognizes that site-specific analysis and public involvement may be necessary prior to implementing some of the proposals contained in this document. As implementation of site-specific proposals are considered, they will be evaluated to determine if they are subject to the National Environmental Policy Act (NEPA) and all required procedures shall be executed.

The Shawnee also recognizes that proposals relating to fees will require consistency with criteria outlined in the Recreation Enhancement Act (REA) and coordination with the appropriate Recreation Resource Advisory Committee (RRAC).

## **C. Forest Recreation Niche/Vision**

**Shawnee recreation niche** (2017 revision): *The Shawnee National Forest will provide quality recreation opportunities and services to the public that are consistent with our unique place among recreation providers in southern Illinois. We will manage recreation areas and programs on national forest lands in compliance with Forest Plan direction and compatible with ecosystem sustainability. We will seek opportunities to strengthen interest and participation in recreation on the Shawnee by working in partnership with organizations and individuals with an interest in protecting our natural and recreation resources.*

*The Shawnee National Forest recreation niche includes those settings and facilities that are unique to the Forest and compliment rather than compete with existing facilities of other southern Illinois public and private recreation providers. Where other providers offer highly developed camping, lodging, dining or big-lake water sport facilities, the Shawnee National Forest has relatively large expanses of undeveloped forested land to invoke exploration and discovery in*

*families and individuals, and provide visitor opportunities for solitude, challenge, and adventure in a variety of forms. In keeping with our niche, and consistent with funding and staffing levels, the Shawnee will concentrate on the following recreation program:*

- 1. Provide outstanding opportunities for authorized trail activities through a well-managed designated trail system and associated support facilities. This will be an interconnected system of trails that serves many different people, from day hikers to equestrians. For greatest success, the trail system will be supported by a network of volunteers and partners that assist in their construction and maintenance.*
- 2. Provide a range of outdoor recreation opportunities, such as camping, climbing, fishing, hiking, horse riding, hunting, paddling, scenic driving, wilderness exploration, and wildlife watching, appropriate to the natural settings the Forest provides, including seven designated Wilderness areas, developed recreation areas, natural areas, proposed Wild and Scenic Rivers, national scenic byways, the Trail-of-Tears National Historic Trail and a number of other significant historic sites.*
- 3. Maintain appropriate infrastructure at recreation sites, such as Garden of the Gods, Lake Glendale, Pounds Hollow, Bell Smith Springs, Lincoln Memorial, Johnson Creek, and Little Grand Canyon. This includes a variety of developed recreation opportunities at campgrounds, water access sites, Picnic Areas, observations areas, trailheads, day use areas and other facilities that support land, water, and trail-based recreation.*
- 4. Manage blocks of land designated for semi-primitive access that provide areas for recreationists seeking the probability of a more remote experience. This includes some lands and waters managed specifically for fish and wildlife, providing opportunities for consumptive and non-consumptive wildlife-oriented dispersed recreation.*
- 5. Provide meaningful interpretation of the natural and cultural heritage of southern Illinois.*

*The success of our recreation program will depend upon continuously monitoring Forest visitors and their recreational preferences and by meeting public expectations for cleanliness, condition, and safety at our facilities. The future of quality recreation on the Shawnee National Forest will be secured by providing desirable opportunities within the constraints of our appropriated funding, recreation fees, and other inputs to maintain fiscal accountability in our programs and facilities. This will require an ongoing emphasis on public-private collaboration, with a growing need for significant external contributions where possible.*

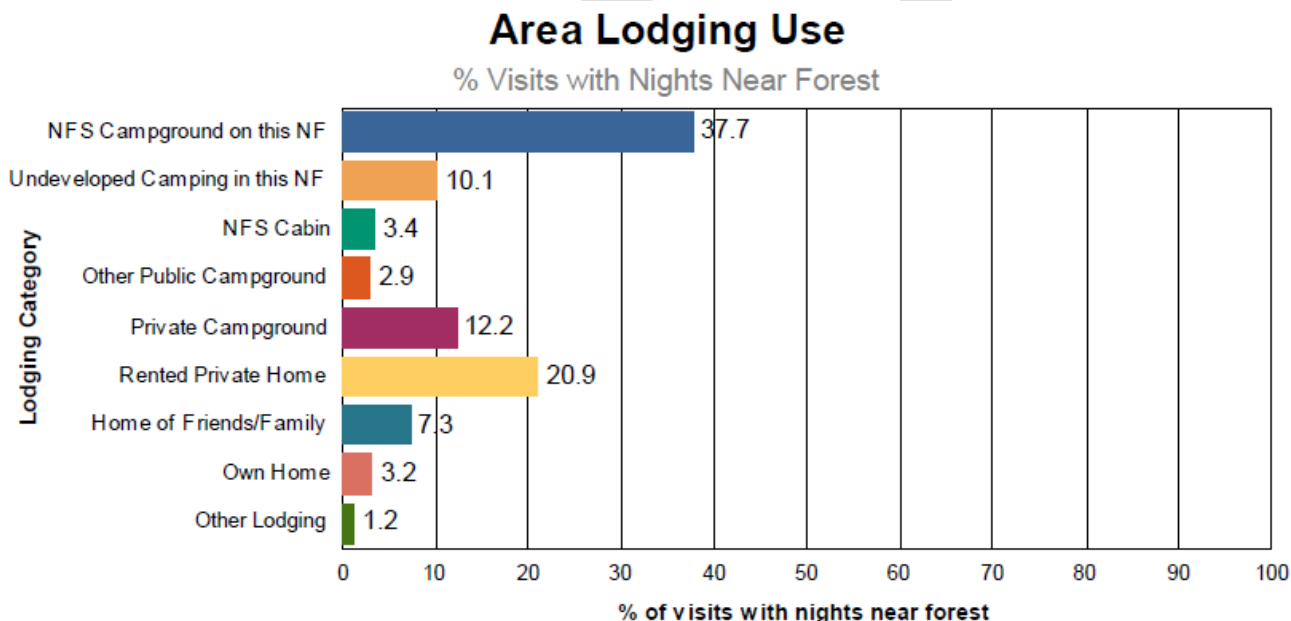
## **D. Supporting Information**

### **Visitor Use and Economic Contribution to Area Economy**

Data collected during the 2018 National Visitor Use Monitoring (NVUM) efforts on the Shawnee National Forest provide a snapshot of our visitors – where they came from, which recreational activities they were engaged in, and other related information. Additional economic modeling results are presented here to estimate how visitor spending contributes to local economies.



For the approximately 344,000 visitors to the Shawnee National Forest annually, the most frequently reported activities are hiking, viewing natural features / wildlife, and general relaxing. Other popular activities include hunting, fishing, and horseback riding. More than 1/3 of the visitors stay overnight on their trips (38.7%), and for those spending one or more nights in or near the forest, various types of lodging options are available. The 2018 data (**Figure 1** below) indicates that the most popular lodging option for visitors who spend one or more nights at or near the Forest was to camp at developed campgrounds on the Forest; the next most popular option was to rent a private home. This does represent a significant change from the 2013 NVUM results when private campgrounds accommodated 39.6% of respondents and rented homes 16%, while camping on the national forest included 10.9% in developed campgrounds and 18% in undeveloped camping. Discrepancies in data collection methods and visitor response rates may explain this variation, which should be further assessed to clarify the economic impact of forest visitors to the local hospitality industry.



**Figure 1: 2018 NVUM – Area Lodging Use**

Business establishments in the local area – including outfitters and guides, restaurants, grocery stores, gas stations and other services – benefit from recreation spending. Total spending by visitors to the Shawnee National Forest is about \$16.7 million annually. In an average year, visitor expenditures support over 200 full- and part-time jobs, and \$5.48 million in labor income. These jobs and income often occur in small, rural communities and are therefore an important contribution to economic and social sustainability. **Table 1** displays the economic contributions from forest visitors. Note that employment is the estimate of average annual full-time, part-time, temporary, and seasonal jobs, while labor income is the value of wages, salaries and benefits for wage earners plus income to local business owners.

**Table 1: 2018 NVUM – Economic Contributions from Shawnee National Forest Visitor Spending**

	Visitor Expenditure (millions of 2016\$)	Employment Supported by Visitor Spending	Labor Income Supported by Visitor Spending (millions of 2016\$)
<b>Local*</b>	\$4.70	56	\$1.48
<b>Non-Local*</b>	\$11.98	156	\$4.00
<b>Total</b>	<b>\$16.70</b>	<b>212</b>	<b>\$5.48</b>

\*Local visitors are those who travel less than 50 road miles from home to the recreation site visited and non-local visitors are those who travel greater than 50 road miles to the recreation site visited.

**Table 2** provides information about self-reported travel distance from home to the interview site. This can be useful to gaining broad insights on visitor use and economic impacts; since visitors who have not traveled far from home to the recreation location usually spend less than visitors traveling longer distances, especially on items such as fuel and food. Many (62%) visitors to this Forest traveled 100 miles or less from home.

**Table 2: 2018 NVUM - Percent of National Forest Visits by Distance Traveled**

Miles from Survey Respondent's Home to Interview Location	National Forest Visits (%)
0 – 25 miles	27.3
26 – 50 miles	16.4
51 – 75 miles	10.1
76 – 100 miles	8.9
101 – 200 miles	14.6
201 – 500 miles	17.4
Over 500 miles	5.2

The top 10 most popular activities (% participations and hours spent) are presented in **Table 3**. Note that since most national forest visitors participate in several recreation activities during each visit, it is more than likely that other visitors also participated in this activity but did not identify it as their main activity.

The activity data shown in Table 3 also varies from the 2013 NVUM results – while the top 5 are the same, in 2013 they were followed by horseback riding, visiting historic sites, some other activity, picnicking, and nature study, with hunting at number eleven. Likewise, the “main activity” named in 2018 indicates a shift from 2013 (**Table 4**). This shift may represent an actual change in visitor habits, or it may be a result of the sampling methodology. Further investigation is needed.

**Table 3: 2018 NVUM - Top 10 Activity Participation**

<b>Activity</b>	<b>% Participation</b>	<b>% Main Activity</b>	<b>Avg. Hours Doing Main Activity</b>
Hiking / Walking	71.0	43.4	2.6
Viewing Natural Features	52.1	9.6	4.0
Relaxing	45.8	4.7	18.6
Viewing Wildlife	37.8	2.0	4.8
Driving for Pleasure	24.2	3.9	2.8
Developed Camping	13.4	5.5	30.2
Picnicking	12.3	0.4	1.4
Nature Center Activities	10.2	0.1	3.2
Fishing	9.6	5.7	5.0
Hunting	9.3	8.6	12.2

**Table 4: 2013 and 2018 NVUM – % Main Activity**

<b>2013</b>		<b>2018</b>	
<b>Main Activity</b>	<b>% Respondents</b>	<b>Main Activity</b>	<b>% Respondents</b>
Hiking/Walking	29.4	Hiking/Walking	43.4
Horseback Riding	18.0	Viewing Natural Features	9.6
Some Other Activity	9.5	Hunting	8.6
Hunting	8.5	Fishing	5.7
Viewing Natural Features	7.3	Horseback Riding	5.5

### **Supporting Recreational Visitor Needs**

Southern Illinois is rich in outdoor recreation opportunities from a variety of sources including both federal and state agencies, as well as commercial providers. Particularly notable opportunities located in Illinois within 50 miles of the Shawnee National Forest include: 12 Illinois State Parks and Recreation Areas, four State Fish and Wildlife Areas, and one State Forest that provide developed campgrounds as well as other amenities; seven Corps of Engineers campgrounds located on the water, generally with boating and/or swimming facilities; and four campgrounds located on the Crab Orchard National Wildlife Refuge. Private businesses provide a variety of other lodging choices from highly developed campgrounds to cabins, lodges, and even tree houses. Twelve private horse camps are operated in close proximity to the forest, providing full RV hookups and stalls or highlines for the use of equestrians coming to ride the national forest trail system. At least ten additional developed campgrounds serve non-equestrian campers in the vicinity of the forest. Other businesses support a wide variety of other recreational activities, including zip lines, ATV parks, mountain bike and road bike activities, marinas, hunting clubs and outfitters, and golf courses.

Given the Shawnee NF's proximity to the state boundaries, recreational opportunities in surrounding states are also relevant to forest visitors' activities, options, and decisions. Federal, state, and local municipalities in Indiana, Kentucky, and Missouri operate more than 20 campgrounds within 50 miles of the Shawnee NF boundary, and privately-operated campgrounds

account for another 30 camping and RVing venues. Similar recreation-based businesses operate in the surrounding states, as well.

Many of these other providers in and around southern Illinois offer highly developed camping and RV accommodations, as well as lodges and cabins, dining facilities, and water access, especially big-lake water sports. In our effort to compliment those outside opportunities, the Shawnee National Forest focuses on its specialties: large expanses of undeveloped forest, including wilderness areas; an extensive trail system; and the wide variety of unique recreation opportunities that our forest provides, including back country camping, climbing, hiking, horse riding, hunting, paddling, scenic driving, small lake boating and fishing, wilderness exploration, and wildlife watching. Developed recreation focuses on providing access and support to these opportunities, such as trailheads, picnic areas, interpretive sites, and observation sites. While the Shawnee maintains campgrounds, the emphasis is on proximity to the forest recreation opportunities rather than developed camping as the primary purpose.

Based on the NVUM data presented above, observation, and anecdotal evidence, recreational interests have changed over time. Hiking remains far and away the activity with the highest percent participation and the #1 “main activity” listed for forest visits. The other dominant trail use on the Shawnee is horseback riding, which continues to be popular, though its NVUM ranking dropped from 2013 to 2018 – from #2 in the Main Activity listing to #5. “Viewing natural features,” hunting, and fishing have been consistently in the top six main activities since the NVUM sampling began in 2001. Driving for pleasure and viewing wildlife have also been consistently popular activities, though rarely the main activity for a visit. Camping at developed sites had a dip in 2008 and 2013, but the numbers rebounded in 2018 – this may be a relic of sampling methodology but suggests that use of Forest Service campgrounds is holding steady.

During the time period covered by NVUM sampling (2001-2018), there has been a decline in the popularity of other activities, such as picnicking and swimming, which both declined by more than half in the percentage of people who came to the forest for that specific activity and also the percentage of people who participated in the activity while visiting for some other reason. The decline in lake swimming is also shown by the facility use calculations: swimming areas were utilized by 26% of respondents in the 2001 NVUM, down to 6% in 2018, although the low was 4% in 2013. The increased availability of public and private swimming pools has been suggested as a significant factor in the decreasing use of lake beach swimming sites. These changes in use suggest a need for further investigation prior to significant investment in swimming and picnic sites on the Shawnee.

Activities not specifically captured in the NVUM sampling are also growing in popularity on the Shawnee. Most notable is rock climbing – southern Illinois offers natural climbing opportunities that are rare in the Midwest, and Jackson Falls on the Shawnee is considered one of the premier sites. Use of this general forest area has grown extremely fast in the last decade, creating impacts and opportunities that the Forest needs to explore. Paddling – kayak and canoe – also seems to be increasing and several lakes on the forest provide prime opportunities for a quiet paddle with limited or no motorboat traffic and ample wildlife and scenery to admire. Bicycling is



growing on and around the forest and the question of providing mountain bike trails will need to be investigated in depth soon. Note that these are all activities that require skill but a lesser equipment cost than some of the traditionally popular recreation activities.

### **Status of Recreation on the Shawnee National Forest**

The cost of operating and maintaining Forest Service developed recreation facilities is an on-going concern. The Shawnee's recreation budget has been essentially flat for the last five years, and projections indicate that it will remain so or possibly decline. But while the available funds stayed the same, the cost of operating and maintenance efforts has increased with inflation and aging infrastructure. A sustainable recreation program is about more than just the economics, however; we also need to be sure that our efforts are supporting the current recreational interests of the visitors.

Concerns over rising costs and changing interests were identified at the time of the 2008 Recreation Facility Analysis. The actions proposed from that analysis did move the forest towards a more "right-sized" developed recreation program, although they were not easy decisions. A number of sites were proposed for closure or a decrease in amenities/service as a result of the 2008 analysis. **Table 5** shows which of the proposed changes have been implemented, as well as additional projects that became necessary and were completed during the same time period.

However, the 2008 RFA proposed closures were not fully implemented: Tower Rock Campground had been proposed for full closure and decommissioning, but instead it was retained with reduced amenities – fewer campsites and removal of the potable water tank. Because of the decrease in services, the fee was eliminated, and the smaller campground is now maintained as a free site. In addition, the Oakwood Bottoms Greentree Reservoir was proposed to start a glide path toward decommissioning; however, interest from the public and several partners have reversed that plan, and the site is being maintained. Although it was not planned, the Johnson Creek Beach has been decommissioned due to siltation of the lake at that location which made the swimming site undesirable to visitors and difficult to maintain.

Fee changes were also proposed under the 2008 RFA: an increase in campground fees was implemented for the five Forest Service-managed campgrounds. Proposed standard amenity fees for eight developed day use sites were not initiated. This proposal was withdrawn due to public concern over proposed trail use fees which influenced attitudes toward the day use site fee proposal.

The major pruning of developed recreation sites that occurred following the 2008 RFA eliminated nearly \$350,000 in deferred maintenance and has placed the Shawnee in a reasonably sustainable position relative to funding and staffing for operations. Nevertheless, ever-growing issues with aging infrastructure means that the deferred maintenance balance continues to grow and that high future repair costs are unavoidable. In the 2018 RSA process, the forest considered various options to address this imminent shortfall, including further closures of developed recreation sites, removal of some infrastructure, implementation of fees, and increasing volunteer support. For some of our sites, the DM is too extensive to be addressed with small efficiencies – a

**Table 5: Implementation of 2008 RFA proposed actions.** Green indicates additional site improvements completed in the same time frame that were not part of the 2008 RFA proposal.

<b>Decommission</b>	<b>Partial decommission</b>	<b>Decrease service/amenities</b>
Johnson Creek single family campground	Loops 1 & 2 in Pine Ridge campground at Pounds Hollow	One Horse Gap Lake boat ramp
Johnson Creek beach	Tower Rock campground – decrease # sites, remove water tank, eliminate fee	Remove 1 picnic shelter at Johnson Creek picnic site
Buck Ridge campground at Lake of Egypt	Illinois Iron Furnace	Remove toilet, decrease # tables and grills at Hunting Branch picnic area
Tower Rock picnic site		Remove toilet at High Knob observation site
Saddle Hill		Decrease # sites at Camp Cadiz
Teal Pond		
Bailey Place at Lake Glendale		

<b>Replace</b>	<b>Improve</b>	<b>Construct</b>
Roof on 1 picnic shelter at Johnson Creek picnic site	Electrify one loop at Pine Ridge Campground at Pounds Hollow	Drilled well and installed well pump for potable water at Johnson Creek Group Campground
2 toilets in Johnson Creek Group Campground	Repair/refurbish both toilet buildings at Garden of the Gods Observation Trail	Additional toilet at Pharaoh picnic area/Garden of the Gods Observation Trail
Boat dock at Pomona boat launch	Repaired toilet at Lincoln Memorial	
Wastewater and potable water systems at Lake Glendale		
Toilet at Pharaoh picnic area		
2 Toilets and water tanks at Pharaoh Campground at Garden of the Gods		
Picnic shelter at Lincoln Memorial		
1 toilet at Pine Hills Campground		
Camp Cadiz toilet building		
Roof on picnic shelter at Iron Furnace		
1 toilet at Tower Rock campground		
Boat dock at Johnson Creek boat launch		

significant capital investment is needed to bring the facilities back up to a manageable condition to extend their working life expectancy. The capital investment needs are identified in the Table of Tasks beginning on page 21. If this capital funding is not available, the forest will likely be looking at closures/decommissioning in the future to eliminate the most degraded facilities.

But it is not just about closing sites. In 2014 electrical service was made available in 13 campsites at the Pine Ridge Campground in Pounds Hollow. Since then there has been a notable increase in utilization of those sites and in fee intake. The ability to charge electronics is a valuable service for most campers these days, and based on the public's response, we are considering adding electric to other campsites and campgrounds where feasible. In addition, the growth of rock-climbing popularity is having a major impact on the Jackson Falls area of the Shawnee. In the near future the forest will begin considering the possible development of a new recreation area at this location to support visitor interest and to protect resources from the current unmanaged user impacts. This project is not considered in the RSA because it is not an existing developed recreation area (other than a small trailhead). Planning and analysis is expected to begin on this project in the next 5 years and will include opportunities for public involvement at both planning and environmental analysis stages.

### **Public Input**

The draft RFS and proposed management actions will be shared during a February-March 2020 public engagement period. The RFS and supporting materials will be made available on the forest website and presented during public open houses. In addition, the Forest will host multiple stakeholder meetings to discuss this proposal with our partners and counterparts in outdoor recreation in southern Illinois. The Forest will use the information, comments, and other suggestions received from federal, state, and local agencies, tribes, landowners, organizations, and other individuals and incorporate them into the final 5-year RFS.

A Recreation Enhancement Act (REA) fee proposal has been initiated for some recreation sites proposed in this RFS. The public participation period for the fee proposal ran from August 14 through December 26, 2019. Any comments provided that are relevant to the overall recreation program on the Shawnee will be taken into consideration in the final RFS.

All actions in this RFS are proposals requiring implementation actions. The forest expects to begin implementing some proposals from this strategy during the 2020 recreation season. Some actions may require a level of environmental analysis in accordance with the National Environmental Policy Act. Proposed management actions may shift slightly as a result of continued public input and changing conditions, but projected agency funding and resources will still constrain the total number of sites and services the Forest Service can provide into the future.

## 2. Plan Summary - Programmatic Results of Implementation

### A. Brief Description of RSA Process

#### **Purpose:**

Create a 5-year Recreation Facility Strategy (RFS) for recreation sites to contribute to sustainability on the unit.

#### **Opportunity To:**

- Update Infra to reflect accomplishments from the 2008 Recreation Facility Analysis (RFA), 2010 Recreation Site Improvement (RSI), and other projects.
- Include sites not included in the original RFA that better represent the unit's entire recreation site program.
- Categorize recreation sites for future investments aligned with the sustainability goals (Social, Economic, Ecological) of the unit.

#### **Overview:**

The purpose of RSA was to create a 5-year Recreation Facility Strategy (RFS) for recreation sites to contribute to sustainability on the Shawnee. RSA is an evolution of the RFA which was completed on the Shawnee in 2008. The RFA process was completed to meet the Agency requirements of facility master planning, and the goals of RFA focused on operating and maintaining sites to standard and reducing deferred maintenance costs. It did not include an overall program sustainability analysis, and the questions were primarily intended to identify what the unit could afford to operate. Thus, many units had sites that fell "below the line" meaning they did not meet the goal of *"Operating & Maintaining a financially sustainable recreation sites program to national quality standards."* RSA broadens these goals to consider how recreation sites contribute to social stability, ecological integrity, and economic viability of the forest and its communities. The Shawnee looked at the types of recreation sites and amenities being offered across the landscape of southern Illinois (state, county, private) to identify gaps or overlaps in recreation opportunities. This was a critical factor in the analysis building the connection the forest has to these communities.

RSA is an internal analysis tool that guides a unit's priorities and investments for recreation sites over 5 years. This RFS serves as a basis of information for subsequent planning, including public participation and Forest Leadership Team decision making.

#### **Process:**

Step 1: Update Infra Recreation Sites module

- Conducted data interviews with each district (July 2017)
- Updated Infra based on results of interviews

Step 2: Agree on sustainability criteria

- Chose four criteria in each sphere of sustainability (social, economic, environmental)
- See Criteria Master List below



Step 3: Fill in RSA Tool (Excel Workbook using Infra data)

- Created RSA Tool based on updated Infra data
- Input and documented management options for the next 5 years
- Adjusted Fees, O&M, and DM to reflect management changes over the next 5 years
- Answered sustainable recreation criteria for each site (see Criteria Master List)
- Assigned each site to a category (see RSA Category list below)
- Completed RFS estimated implementation dates, costs, and commentary.

Step 4: Create new RFS document

Step 5: Discuss RFS with FLT

Step 6: Present draft RFS to the public

Step 7: Finalize RFS and proposed management actions

## **B. Categories**

Sites are prioritized by sustainable criteria score and then by category. The categories (see **Table 6**) allow the forest to identify sites based on user preferences, resource protection, and potential actions.

**Table 6: RSA recreation site category description.**

Category	Name	Description
OS	OTHER SITE	Sites that do not fit any of the other categories.
RP	RESOURCE PROTECTION SITE	Sites needed to protect specific resources. Without the site the resource will suffer serious degradation. (e.g., Snake Road)
SL	SIGNATURE LOCAL SITE	Sites best representing Forest recreation niche, and local user preferences (e.g., Lincoln Memorial, Pounds Hollow Lake, & Lake Glendale Beach)
ST	SIGNATURE TOURISM SITE	Sites best representing Forest recreation niche, and non-local visitor preferences (e.g., Garden of the Gods)

## **C. Critical Monetary Factors**

**Table 7** displays asset and expense information for the Shawnee National Forest under current conditions (“Baseline”) and estimated following implementation of the 5-Year Action Plan (“Changed Condition”). The Fee Receipts Available under the Changed Condition column is based on implementation of day-use fees at six sites and the increase in camping fee at Pine Ridge Campground. However, these Changed Condition estimates do not include implementation of projects requiring alternative funding sources.

Deferred Maintenance (DM) refers to maintenance that was not performed when it was first needed or when it was scheduled and which, therefore, was put off or delayed for a future period. When allowed to accumulate without limits or considerations of useful life, deferred maintenance leads to deterioration of performance, increased costs to repair, and decrease in asset value. Current DM estimate for all Shawnee National Forest recreation facilities is \$3,196,539. Estimated replacement value for all Shawnee recreation facilities is \$8,717,345.

Implementation of the program of work based on available funding will result in a deferred maintenance decrease of 11%. If the alternative funding (an estimated \$2,415,000 needed) becomes available for *all* projects within the program of work, that decrease will be drastically more significant, taking the DM from \$3,196,539 down to \$425,577 and significantly increasing the life expectancy of the forest's recreation facilities.

Appendix D provides the annual funding allocation to support Shawnee recreation sites and the expected O&M costs in a summary table. It also demonstrates a running balance of remaining funds with expenditures made for sites according to sustainable criteria score.

**Table 7: Shawnee National Forest recreation funding and expenses relative to the RFS recommendations.**

<b>0908 - Shawnee NF</b>				
	<b>CRITICAL MONETARY FACTOR</b>	<b>BASELINE CONDITION (Benchmark Data)</b>	<b>Recreation Facility Strategy - CHANGED CONDITION (does not include DECOMMISSION sites)</b>	<b>Recreation Facility Strategy - PERCENT CHANGE (does not include DECOMMISSION sites)</b>
<b>OPERATIONAL ASSETS</b>	APPROPRIATED FUNDS AVAILABLE	\$320,066	\$320,066	<b>0%</b>
	FEE RECEIPTS AVAILABLE	\$29,195	\$155,784	<b>434%</b>
<b>EXPENSES</b>	OPERATING COSTS	\$213,052	\$209,029	<b>-2%</b>
	ANNUAL MAINTENANCE COSTS	\$165,756	\$110,659	<b>-33%</b>
	DEFERRED MAINTENANCE COSTS*	\$3,196,539	\$2,839,577	<b>-11%</b>

\*Deferred Maintenance change includes all sites except **Decommission** and sites needing **Alternative Sources** of funding.

## D. Inventory

**Table 8** displays anticipated shifts in the character of the Shawnee's developed recreation sites program as a result of fully implementing the 5-Year Action Plan.

**Table 8: Recreation site future conditions resulting from implementation of the projects in the RFS 5-year action plan.** Development scale definitions are provided in Appendix A.

	INVENTORY CHARACTERISTICS	BASELINE CONDITION (Benchmark Data)	FUTURE CONDITION	RFS Net Change (Future Condition minus Baseline)
<b>SITE TYPES</b>	CAMPGROUND DEV SCALE 2	2	2	0
	CAMPGROUND DEV SCALE 3	4	4	0
	CAMPGROUND DEV SCALE 4	2	2	0
	CAMPGROUND DEV SCALE 5	2	2	0
	PICNIC AREA DEV SCALE 2	3	2	-1
	PICNIC AREA DEV SCALE 3	6	6	0
	PICNIC AREA DEV SCALE 4	1	1	0
	PICNIC AREA DEV SCALE 5	1	1	0
	TRAILHEAD	42	41	-1
	BOATING/ SWIM SITES/ FISHING SITES	25	23	-2
	GROUP CAMPGROUND/ GROUP PICNIC	2	2	0
	INTERP/ MINOR/ OBSERVATION/ INFO SITES	11	11	0
	OTHER	4	4	0
	CATEGORY TOTALS	105	101	-4
<b>OTHER CHARACTERISTICS</b>	CAPACITY (PAOT)*	6,415	6,253	-162
	CAPACITY (PAOT-DAYS)**	1,850,352	1,837,157	-13,195
	# DRINKING WATER SYSTEMS	7	6	-1
	# WASTEWATER SYSTEMS	5	5	0
	DW SYSTEM ANNUAL MAINT COST	\$10,100	\$8,600	-\$1,500
	WW SYSTEM ANNUAL MAINT COST	\$2,000	\$2,000	\$0
	BUILDING ANNUAL MAINT COST	\$107,787	\$107,787	\$0

\* PAOT = Person at one time (based on site design)

\*\* PAOT DAYS = Number of days a site is open x PAOT for that site

## E. Results

The Programmatic Results Matrix in **Table 9** displays the significant programmatic results of implementing all proposed actions, including those requiring an alternative funding source investment. Particularly significant changes include an improvement in both recreation niche conformance and in PAOT-days managed to standard. The implementation of the capital improvement projects that require outside funding would result in a drastic reduction in the deferred maintenance costs associated with recreation sites. Implementation of the 5-year action plan without additional funding would result in only an 11% reduction in deferred maintenance (see **Table 7**).

**Table 9: Recreation program changes resulting from implementation of the RFS 5-year action plan.**

	PROGRAMMATIC RESULTS	BASELINE CONDITION (Benchmark Data)	Recreation Facility Strategy - CHANGED CONDITION (does not include DECOMMISSION sites)	Recreation Facility Strategy - PERCENT CHANGE (does not include DECOMMISSION sites)
<b>METRICS</b>	AVERAGE NICHE CONFORMANCE SCORE * (Out of Maximum Score of 5)	2.14	4.94	<b>131%</b>
	AVERAGE DEVELOPMENT SCALE	2.09	2.02	<b>-3%</b>
	% OF CAPACITY W/ ACCESSIBLE FURNISHINGS OR FULLY ACCESSIBLE	50.6%	51.6%	<b>2%</b>
	PAOT-DAYS TO REGIONAL REQUIRED STANDARDS	1,706,024	2,734,570	<b>60%</b>
	CAPACITY (PAOT)	6,415	6,253	<b>-3%</b>
	CAPACITY (PAOT-DAYS)	1,850,352	1,837,157	<b>-1%</b>
	ANNUAL O&M COST PER PAOT DAY	\$0.20	\$0.17	<b>-15%</b>
	ANNUAL NET O&M COST PER VISIT	\$1.83	\$1.54	<b>-16%</b>
	TOTAL DEFERRED MAINTENANCE	\$3,196,539	\$424,577	<b>-87%</b>
	TOTAL ANNUAL OPERATIONS AND MAINTENANCE	\$378,809	\$319,688	<b>-16%</b>

\* Baseline Niche Conformance Score is taken from the Recreation Facility Analysis completed in 2008. The Shawnee's RFA average niche conformance was 8.55 out of a possible 20. The RSA tool converted that score to make it comparable to the RSA niche score which has a 0-5 scale. That conversion makes the RFA score (baseline) 2.14; the changed condition score comes from the answers to sustainable criterion #1.



Persons-At-One-Time (PAOT) is a measure of facility or site designed recreation carrying capacity. National conventions include 5 persons per family picnic/camp unit, 3.5 persons per parking lot stall at a trailhead or visitor center, 1.5 persons per motorcycle parking stall and 40 persons per tour bus parking stall.

Operations and maintenance (O&M) include the activities and resources required to annually operate and maintain recreation sites at a level of quality which meets their management objectives and customer satisfaction. Costs associated with O&M are generally recurrent, as opposed to capital investment costs that are generally one-time and non-recurrent.

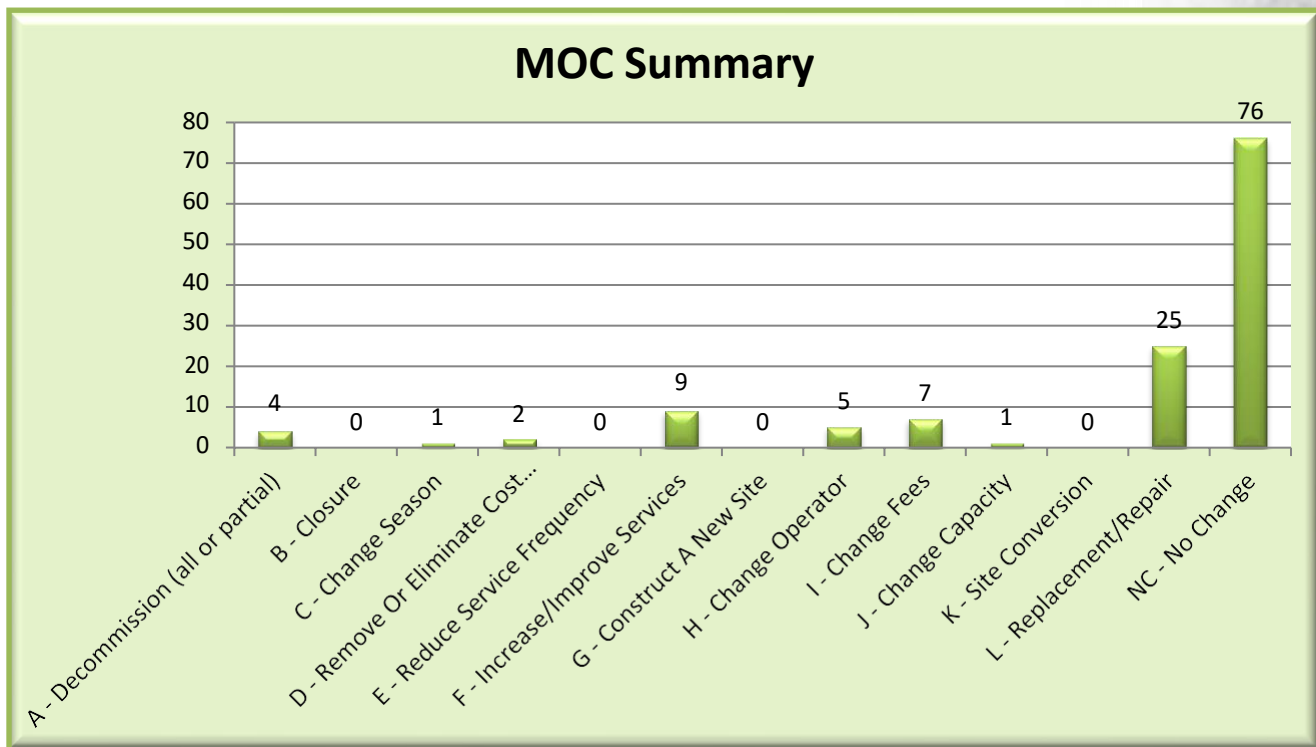
Annual O&M Cost per visit and per PAOT day are averages derived from a summation of all the analyzed recreation facilities on the Forest; the cost per visit and per PAOT for each site and site type will vary.

## F. Proposed Management Option Code Summary

Management option codes (MOC) are categories of action that may be applied to a recreation site. Appendix B provides the full MOC list including more specific subcategories. **Table 10** summarizes the number of Shawnee recreation sites to which each MOC is applied in the 5-year action plan. **Figure 2** presents the same data in a graphical form. The total MOC count in the table does not equal the total number of sites analyzed because multiple codes were applied to some sites.

**Table 10: Management option codes proposed in the 5-year action plan.**

MOC Chart		
MOC Category	MOC Count	MOC %
A – Decommission (all or partial)	4	3%
B – Closure	0	0%
C – Change Season	1	1%
D – Remove Or Eliminate Cost Source Or Service Season	2	2%
E – Reduce Service Frequency	0	0%
F – Increase/Improve Services	9	7%
G – Construct A New Site	0	0%
H – Change Operator	5	4%
I – Change Fees	7	5%
J – Change Capacity	1	1%
K – Site Conversion	0	0%
L – Replacement/Repair	25	19%
NC – No Change	76	58%
<b>Total</b>	<b>130</b>	



**Figure 2: Management option code summary.** The y-axis identifies the number of recreation sites to which the code is applied in the 5-year action plan.

The Shawnee strategy for the next five years is predominantly focused on addressing deferred maintenance issues and other improvements to reduce future maintenance and operating costs and to improve the longevity of the facilities. The majority of recreation facilities are not proposed for any change. Replacement/repair is the most common action proposed. There would be some new or improved services where visitation rates warrant, as well as changes in operator (to utilize more partner and volunteer support at recreation sites). Changes to recreation site fees are proposed: one fee increase at a campground and 6 proposed new day-use-fee sites. No facility closures are proposed at this time. Detailed actions and estimated costs are described in the Table of Tasks below.

Certain tasks – major repair/refurbishment needs – will cost more than the Shawnee annual budget can accommodate. The additional funding need is identified in the Comments column of the Table of Tasks below. Without additional funding to accomplish these tasks, it is likely that the next facility assessment will find conditions have declined to the point that closure and decommissioning of some recreation sites is necessary.

## **G. Recreation Sites Prioritization Report**

The Forest's Recreation Sites Prioritization Report (**Table 11**) lists all developed recreation sites and the proposed tasks for the 5-year action plan. Sites are sorted by Sustainability Score. A

higher score indicates the site is more sustainable according to the criteria identified in Appendix C. The score is an accumulation of 4 criteria for each of the 3 Spheres of Sustainability: social, economic, and environmental. A site whose score box is a lighter shade will be more sustainable (have a higher score) after the 5-year work is completed at that site.

Managing Organization number identifies the Ranger District in which the recreation site is located (90802 is Mississippi Bluffs Ranger District, 90804 is Hidden Springs Ranger District).

Management option codes (MOC) identify the proposed actions for each site and are defined in Appendix B. Site category is defined in **Table 6**: ST – Signature Tourism Site; SL – Signature Local Site; RP – Resource Protection Site; and OS – Other Site.

The “One-time cost” column provides the estimated cost of completing those projects which have the potential to be paid for out the forest’s annual funding allocation. Several projects’ expected cost is far beyond the forest’s budget and will only be completed if alternative funding becomes available (i.e., through special project funding, grants, or partners). These additional investment needs are identified and prioritized in Appendix E.

**Table 11: Recreation sites prioritization report – Table of Tasks.** Table of tasks proposed for the RFS 5-year action plan, including estimated cost and planned years of execution.

\* In the “Cost to Implement” indicates alternative funding will be needed to complete all projects indicated by the MOC.

Managing Org	Site Name	Score (Lighter Shade = Improved Score)	Category	MOC	Planned Start Date	Planned Finish Date	One-Time Cost to Implement Action *	Task Comments
90802	LITTLE GRAND CANYON TRAILHEAD	50	OS	L1, L2, I3	2020	2024	\$35,000	Replace existing toilet with double CXT. Propose new REA day-use fee.
90802	OAKWOOD BOTTOMS GREENTREE RESERVOIR INTERPRETIVE SITE	50	OS	L2, F17	2022	2024	\$10,000*	Install new CXT, repair boardwalk and shelter. Work with partners to repair fishing piers approximately \$15K contribution. Alternative funding needed \$40,000 for CXT
90802	OAKWOOD VIEWING BLINDS WILDLIFE VIEWING SITE	48	OS	NC1			\$0	
90802	SNAKE ROAD NORTH TRAILHEAD	48	RP	NC1			\$0	

Managing Org	Site Name	Score (Lighter Shade = Improved Score)	Category	MOC	Planned Start Date	Planned Finish Date	One-Time Cost to Implement Action *	Task Comments
90804	JACKSON FALLS ACCESS TRAILHEAD	48	OS	L1, L2	2021	2025	\$5,000*	Replace existing toilets with CXTs. Add gravel to parking area. CXT must be funded from alternative source, cost = \$25K
90802	SNAKE ROAD SOUTH TRAILHEAD	48	RP	NC1			\$0	
90804	MILLSTONE BLUFF INTERPRETIVE SITE	48	OS	L1	2023	2024	\$40,000	Replace existing Romtek toilet with CXT.
90804	GARDEN OF THE GODS RECREATION AREA	48	ST	L2, H3, I3	2020	2025	\$50,000*	Repair the flagstone trail, increase volunteers at the site. Outside funding needed to fully refurbish trail; additional needs = \$100K. Investigate adding a day-use fee to the Observation Trail site.
90804	BELL SMITH SPRINGS INTERPRETIVE SITE	46	OS	L1, L2, F12, I3	2020	2023	\$30,000	Replace existing toilet, replace and improve interpretive signage. Propose new REA day-use fee.
90802	POMONA BOAT LAUNCH	46	ST	I3	2020	2020	\$0	<del>Propose new REA day-use fee.</del> (Removed from fee proposal following comment period.)
90802	LINCOLN MEMORIAL PICNIC AREA	46	SL	NC1			\$0	



Managing Org	Site Name	Score (Lighter Shade = Improved Score)	Category	MOC	Planned Start Date	Planned Finish Date	One-Time Cost to Implement Action *	Task Comments
90802	JOHNSON CREEK DEER RUN TRAILHEAD	44	OS	NC1			\$0	
90804	PHARAOH-GARDEN OF THE GODS CAMPGROUND	44	ST	NC1			\$0	
90802	PINE HILLS CAMPGROUND	44	OS	C1, F7, F6, H2	2018	2020	\$0	Add a pavilion with picnic tables; replace tables, lantern posts, gravel pads and fire rings in camp sites; lengthen season to year-round. Already funded from FDDS @\$60K. (Physical work completed in 2018) Increase volunteers at the site.
90804	ILLINOIS FURNACE PICNIC AREA	44	OS	NC1			\$0	
90804	REDBUD - BELL SMITH SPRINGS CAMPGROUND	44	OS	L1	2022	2024	\$40,000	Replace 2 Romex toilets with new CXTs.
90802	TURKEY BAYOU CAMPING AREA	44	SL	NC3			\$0	
90804	POUNDS HOLLOW LAKE SWIMMING SITE	44	SL	F12, I3	2020	2021	\$14,000	Replace interpretive signage and add visitor information signage. Propose new REA day-use fee.

Managing Org	Site Name	Score (Lighter Shade = Improved Score)	Category	MOC	Planned Start Date	Planned Finish Date	One-Time Cost to Implement Action *	Task Comments
90804	PINE RIDGE-POUNDS HOLLOW CAMPGROUND	44	SL	F16, F8, F3, I4	2018	2025	\$85,000*	1. Improve road in electrified loop for site access for RVs. 2. Add dump station and water hook-ups to existing electric sites. Second phase dependent on alternative funding, estimated cost = \$165K. Raise fee for electric sites.
90804	LAKE GLENDALE BEACH SWIMMING SITE	44	SL	L1, L2	2023	2025	\$0*	Repair/refurbish the existing beach house. Work dependent on alternative funding = \$500K.
90804	CARDINAL BAY - LAKE GLENDALE BOATING SITE	43	SL	NC2			\$0	
90802	JOHNSON CREEK BOATING SITE	43	SL	H2, I3	2020	2022	\$0	Pursue partner for operation and maintenance of boating site. Propose new REA day-use fee.
90804	BURDEN FALLS ACCESS TRAILHEAD	42	OS	NC1			\$0	
90804	TRIGG TOWER TRAILHEAD	42	OS	L2	2025	2025	\$0*	Sand-blast and paint fire tower. Work depends on other support, cost = \$75K to \$100K
90802	KAOLIN POND FISHING SITE	42	OS	NC1			\$0	

Managing Org	Site Name	Score (Lighter Shade = Improved Score)	Category	MOC	Planned Start Date	Planned Finish Date	One-Time Cost to Implement Action *	Task Comments
90802	JOHNSON CREEK - PRIMITIVE CAMPING AREA	42	OS	NC1			\$0	
90804	DUTCHMAN LAKE REC AREA FISHING SITE	42	OS	NC1			\$0	
90804	DUCK BAY - LAKE GLENDALE GROUP CAMPGROUND	42	SL	L1, L2	2022	2024	\$0*	Replace 1 toilet building (4 fixtures, running water) and repair historic shelter. Completion of work subject to outside funding, total cost = \$200K.
90804	GOOSE BAY - LAKE GLENDALE GROUP PICNIC AREA	42	SL	L1, L2	2023	2025	\$0*	Replace 1 toilet building (6 fixtures, running water) and repair historic shelter. Completion of work subject to outside funding, total cost = \$350K.
90804	PINE POINT - LAKE GLENDALE PICNIC AREA	42	SL	L1	2024	2025	\$0*	Replace existing toilet with CXT. Dependent on outside funding. = \$40K
90802	BUTTERMILK HILL PICNIC AREA	41	OS	L2	2021	2023	\$15,000	Repair existing toilet vault.
90804	JACKSON FALLS CLIMBING AREA	41	ST	NC1			\$0	
90802	BIG MUDDY WETLANDS TRAILHEAD	40	OS	NC1			\$0	

Managing Org	Site Name	Score (Lighter Shade = Improved Score)	Category	MOC	Planned Start Date	Planned Finish Date	One-Time Cost to Implement Action *	Task Comments
90804	DUTCHMAN LAKE TRAILHEAD	40	OS	NC1			\$0	
90802	MCCANN SPRINGS TRAILHEAD	40	OS	NC1			\$0	
90804	EAST TRIGG TRAILHEAD	40	OS	NC1			\$0	
90802	GODWIN TRAILHEAD-EAST	40	OS	NC1			\$0	
90804	MILLSTONE LAKE FISHING SITE	40	OS	NC1			\$0	
90802	OAKWOOD RR POND FISHING SITE	40	OS	NC1			\$0	
90802	PANTHER DEN TRAILHEAD	40	OS	NC1			\$0	
90804	TURPIN POND FISHING SITE	40	OS	NC1			\$0	
90802	UPPER MCGEE HILL PICNIC AREA	40	OS	NC1			\$0	



Managing Org	Site Name	Score (Lighter Shade = Improved Score)	Category	MOC	Planned Start Date	Planned Finish Date	One-Time Cost to Implement Action *	Task Comments
90804	RIM ROCK (INDIAN WALL) PICNIC AREA	40	OS	NC1			\$0	
90804	PENNANT BAR OPENLANDS TRAILHEAD	40	OS	NC1			\$0	
90804	OAK POINT - LAKE GLENDALE CAMPGROUND	40	SL	L1, L2, F1	2019	2022	\$0*	Refurbish 1 shower house, replace 1 shower house, and add electricity to current non-electric sites. Completion of work dependent on outside funding. Estimated cost = \$800K.
90802	GODWIN TRAILHEAD WEST	38	OS	NC1			\$0	
90802	OAKWOOD BOTTOMS ROAD TRAILHEAD	38	SL	NC1			\$0	
90804	PENNANT BAR PONDS FISHING SITE	38	OS	NC1			\$0	
90804	SHEEPBARN POND FISHING SITE	38	OS	NC1			\$0	
90804	HIGH KNOB TH TRAILHEAD	38	OS	NC1			\$0	
90802	OB OTTER-SLOUGH TRAILHEAD	38	SL	NC1			\$0	

Managing Org	Site Name	Score (Lighter Shade = Improved Score)	Category	MOC	Planned Start Date	Planned Finish Date	One-Time Cost to Implement Action *	Task Comments
90804	TURKEY FARM POND FISHING SITE	38	OS	NC1			\$0	
90802	WATER FALL TRAILHEAD	38	OS	NC1			\$0	
90804	HIGH KNOB OS OBSERVATION SITE	38	OS	NC1			\$0	
90804	ASHBY OPENLANDS TRAILHEAD	38	OS	NC1			\$0	
90802	BLUFF LAKES TRAILHEAD	38	OS	NC1			\$0	
90802	SEXTON CREEK WETLANDS TRAILHEAD	38	OS	NC1			\$0	
90804	TURPIN OPENLANDS TRAILHEAD	38	OS	NC1			\$0	
90804	TOWER ROCK CAMPGROUND	38	OS	H2, L1	2021	2023	\$5,000	Pursue partner for management of the site. Replace fire rings and some tables.
90804	INDIAN KITCHEN TRAILHEAD	38	OS	NC1			\$0	

Managing Org	Site Name	Score (Lighter Shade = Improved Score)	Category	MOC	Planned Start Date	Planned Finish Date	One-Time Cost to Implement Action *	Task Comments
90804	LUSK CREEK TRAILHEAD	38	OS	NC1			\$0	
90802	WINTERS POND PICNIC AREA	38	ST	J1, L1	2021	2022	\$4,000	Increase parking area and replace split-rail fence with sustainable barrier.
90804	HICKORY POINT - LAKE OF EGYPT BOATING SITE	38	SL	NC1			\$0	
90802	GOVERNMENT ROCK OBSERVATION SITE	36	OS	NC1			\$0	
90802	WHITE PINE TRAILHEAD	36	OS	NC1			\$0	
90802	SADDLE HILL OBSERVATION SITE	36	OS	NC1			\$0	
90804	BEAVER TRAIL TRAILHEAD	36	OS	NC1			\$0	
90802	HORSE CREEK TRAILHEAD	36	OS	NC1			\$0	
90802	LOWER MCGEE HILL OBSERVATION SITE	36	OS	NC1			\$0	

Managing Org	Site Name	Score (Lighter Shade = Improved Score)	Category	MOC	Planned Start Date	Planned Finish Date	One-Time Cost to Implement Action *	Task Comments
90804	LITTLE CACHE BOATING SITE	36	OS	L2	2021	2021	\$5,000	Add gravel to existing parking lot and boat ramp.
90802	ROWAN CEMETARY TRAILHEAD	36	OS	NC1			\$0	
90804	ONE HORSE GAP FISHING SITE	36	OS	NC1			\$0	
90804	AIRSTRIPO POND FISHING SITE	36	OS	NC1			\$0	
90804	FORESTRY POND FISHING SITE	36	OS	NC1			\$0	
90802	HIDDEN COVE TRAILHEAD	36	OS	NC1			\$0	
90802	HOWARDTON ACCESS TRAILHEAD	36	SL	NC1			\$0	
90802	RIPPLE HOLLOW TRAILHEAD	36	OS	NC1			\$0	
90802	BIG MUDDY RIVER BOATING SITE	36	SL	NC1			\$0	



Managing Org	Site Name	Score (Lighter Shade = Improved Score)	Category	MOC	Planned Start Date	Planned Finish Date	One-Time Cost to Implement Action *	Task Comments
90802	BUTTERMILK HILL TRAILHEAD	36	OS	NC1			\$0	
90802	INSPIRATION POINT TRAILHEAD	36	OS	NC1			\$0	
90804	LOST POND FISHING SITE	36	OS	NC1			\$0	
90802	GUM RIDGE TRAILHEAD	36	OS	NC1			\$0	
90804	HUNTING BRANCH - BELL SMITH SPRINGS TRAILHEAD	36	OS	NC1			\$0	
90804	CAMP CADIZ CAMPGROUND	36	OS	L2	2022	2022	\$3,680	Repair/tuckpoint an historic chimney. Operating days are actually 365, update in INFRA.
90804	HITCHING POST TRAILHEAD	36	OS	NC1			\$0	
90802	POMONA NATURAL BRIDGE TRAILHEAD	36	OS	NC1			\$0	
90804	PHARAOH-GARDEN OF THE GODS PICNIC AREA	36	ST	NC1			\$0	

Managing Org	Site Name	Score (Lighter Shade = Improved Score)	Category	MOC	Planned Start Date	Planned Finish Date	One-Time Cost to Implement Action *	Task Comments
90802	JOHNSON CREEK CAMPGROUND	36	OS	NC1			\$0	
90804	HUNTING BRANCH PICNIC AREA	35	OS	NC1			\$0	
90804	LAKE TECUMSEH REC AREA FISHING SITE	35	OS	NC1			\$0	
90804	TOWER ROCK OBSERVATION SITE	35	OS	H3	2021	2023	\$0	Increase volunteers at the site.
90804	SALINE SPRINGS DOCUMENTARY SITE	34	OS	NC1			\$0	
90802	POMONA ROAD TRAILHEAD	34	OS	NC1			\$0	
90802	BALD KNOB SOUTH TRAILHEAD	34	OS	NC1			\$0	
90802	COVE HOLLOW TRAILHEAD	34	OS	NC1			\$0	
90802	CROOKED TREE OBSERVATION SITE	32	OS	NC1			\$0	

Managing Org	Site Name	Score (Lighter Shade = Improved Score)	Category	MOC	Planned Start Date	Planned Finish Date	One-Time Cost to Implement Action *	Task Comments
90802	OLD TRAIL POINT OBSERVATION SITE	32	OS	NC1			\$0	
90802	BEAN RIDGE POND FISHING SITE	32	OS	NC1			\$0	
90802	JOHNSON CREEK PICNIC AREA	32	OS	D8, D7	2020	2022	\$15,000	Decommission one picnic shelter. Decommission, close, and seal old well and pump house serving day use area.
90802	BLACK POND WL PARKING WILDLIFE VIEWING SITE	31	OS	NC1			\$0	Fix actual operating days (365) in INFRA.
90802	SHARP ROCK FALLS BOATING SITE	30	OS	NC1			\$0	
90804	STONEFACE TRAILHEAD	0	OS	A1b	2020	2024	\$0	Decommissioning is ongoing. As features break, they are removed.
90804	TEAL POND FISHING SITE	0	OS	A1b	2020	2024	\$0	Decommissioning is ongoing. As features break, they are removed.
90804	TOWER ROCK PICNIC AREA	0	OS	A1b	2020	2024	\$0	Decommissioning is ongoing. As features break, they are removed.
90804	WHOOPIE CAT LAKE FISHING SITE	0	OS	A1b	2020	2024	\$0	Decommissioning is ongoing. As features break, they are removed.

## **H. Feedback/ Public Concerns**

The following proposed actions may be of concern to the public:

- **Decommission -**

Four sites are listed to be decommissioned: Stoneface trailhead, Teal Pond fishing site, Tower Rock picnic area, and Whoopie Cat Lake fishing site. These sites have already begun this process – some features have been removed and others will be eliminated rather than replaced as they break or otherwise become unusable. Following the decommissioning, the areas will be considered General Forest Area and will still be accessible by the public for recreation activities; there will simply be no facilities maintained at the sites.

At other sites, features may be removed as described below:

1. The second picnic shelter at the Johnson Creek picnic area will be decommissioned. One picnic shelter will be retained at the site, which is sufficient for current visitation rates.
2. The well and pump-house at the Johnson Creek day-use area (serves picnic site, boat ramp, and trailhead) will be closed and decommissioned. The cost of repairing and maintaining this well and waterlines for potable water service is excessive for the minimal use at that location. A separate well will continue to provide potable water to the Johnson Creek campground area.

We will continue to review use rates and maintenance requirements, and low-use sites may be identified for decommissioning in the future.

- **Closures -**

There are no sites selected for closure at this time.

- **Change in services –**

There will be an increase in services associated with the extension of the season for the Pine Hills Campground to year-round. This campground is popular with hunters and has no water system to maintain. Keeping it open through the winter serves user interest and does not create any maintenance complications or difficulties.

- **Proposed Fee Changes –**

New fee proposed for six day-use sites:

1. Garden of the Gods Recreation Area
2. Pounds Hollow Beach/Lake
3. Pomona Boat Launch – This site was removed from the final fee proposal following the comment period.
4. Johnson Creek Boat Launch



5. Bell Smith Springs Interpretive Site
6. Little Grand Canyon Trailhead

A fee proposal will be developed to institute a day use fee for these six most highly developed day-use sites on the forest. The fee will be specific to day use amenities and will not affect the fees already associated with adjoining campgrounds. Fees collected will allow for improved maintenance of these sites, including existing deferred maintenance and future repair/replacement needs.

Proposed Fee Increase:

1. Pine Ridge Campground at Pounds Hollow – one loop of this campground has electrical hookups available. The fee for the electrified sites will be increased over the non-electrified sites to cover utility costs and increased maintenance needs.

All proposed fees and fee change will be processed through the National Recreation Fee protocol and reviewed by the Regional Recreation Advisory Committee before a decision is made by the Regional Forester. The process will include public participation. There may be some concern in other areas that did not have a fee before. Proposed implementation is no earlier than 2020.

## Appendix A. Development Scale Guide

RECREATION SITE INVENTORY CLASSIFICATION		
(Development Scale)		
CLASS #	SITE CHARACTERISTICS	
RESOURCE PROTECTION	0	<b>No investment</b> <ul style="list-style-type: none"> <li>o User created site</li> <li>o No constructed improvements provided at the site</li> <li>o Circulation and parking undefined; may be multiple routes, not designed</li> </ul>
	1	<b>Little investment</b> <ul style="list-style-type: none"> <li>o User created site,</li> <li>o Rustic or rudimentary improvements, such as barriers or signs, provided for resource protection</li> <li>o Circulation and parking informal, may be contained; not designed</li> </ul>
	2	<b>Some investment</b> <ul style="list-style-type: none"> <li>o Defined site; improvements typically accommodate user created patterns</li> <li>o Rustic improvements, such as toilets, tables or fire rings, provided <u>primarily</u> for resource protection</li> <li>o Circulation and parking contained and defined</li> </ul>
USER COMFORT & CONVENIENCE	3	<b>Moderate investment</b> <ul style="list-style-type: none"> <li>o Designed site</li> <li>o Contemporary or rustic improvements, such as toilets, potable water service, signs, picnic tables or fire rings, provided for resource protection and user comfort</li> <li>o Circulation is defined; interior roads are maintenance level 3 or 4</li> </ul>
	4	<b>High investment</b> <ul style="list-style-type: none"> <li>o Designed site</li> <li>o Contemporary improvements, such as potable water service, toilets, shelters, picnic tables or fire rings, provided primarily for user comfort and convenience</li> <li>o Roads, parking, and pathways are hard-surfaced and typically paved; interior roads are at maintenance level 4 or 5</li> </ul>
	5	<b>Significant investment</b> <ul style="list-style-type: none"> <li>o Designed site</li> <li>o Contemporary improvements primarily provided for user comfort and convenience and usually include flush toilets and potable water, and may include showers, bathhouses, laundry facilities, electrical hookups, and garbage services</li> <li>o Roads, parking, and pathways are paved; interior roads are at maintenance level 4 or 5</li> <li>o Mowed lawns and clipped shrubs are not unusual</li> </ul>

## Appendix B. Management Option Code List

### A. Decommission

1. Decommission
  - a) As soon as practical (A1a)
  - b) Begin glide path (A1b)
2. Partial decommission (e.g., remove campsites next to boat ramp) (A2)

### B. Closure

3. Close – defer decommissioning (B1)
4. Partial closure – defer decommissioning (e.g., close campsites next to boat ramp but don't remove yet) (B2)
5. Closure pending completion of site improvements (B3)

### C. Change Season

6. Increase season (C1)
7. Reduce season (C2)
8. Intermittent closure during season (C3)
9. Open weekends/holidays only (C4)
10. Open for hunting season only (C5)

### D. Remove or Eliminate a Cost Source or Service Season

11. Reduce mowed area (D1)
12. Remove trashcans (D2)
13. Remove restroom facilities (D3)
14. Remove tables and/or grills (D4)
15. Other changes to site design or features to reduce costs (D5)
16. *Not Available for Use*
17. Other changes to eliminate on-site services (D7)
18. Close or remove water system (D8)
19. Close or remove waste water system (D9)

### E. Reduce Service Frequency Season

#### THESE CODES MAY REQUIRE PUBLIC NOTIFICATION OF REDUCED SERVICES

20. Reduce service – mow less frequent (E1)
21. Reduce service – trash and clean-up less frequent (E2)
22. Reduce service – restroom cleaning less frequent (E3)
23. Reduce service – staff presence reduced on site (E4)
24. Reduce service – less frequent bulletin board posting (E5)
25. *Not Available for Use*
26. Reduce service – other (E7)

## **F. Increase/Improve Services**

- 27. Add electrical hook-ups (F1)
- 28. Increase amps of existing electrical hook-ups (F2)
- 29. Add water hook-ups (F3)
- 30. Add sewer hook-ups (F4)
- 31. Add hot showers (F5)
- 32. Upgrade existing feature (e.g., replace SST with flush toilets) (F6)
- 33. Add amenities (playground, swim area, etc.) (F7)
- 34. Add a host site(s) (F8)
- 35. Major reconstruction/upgrade of the recreation area (F9)
- 36. Increase staff presence (including law enforcement) (F10)
- 37. *Not Available for Use*
- 38. Improve visitor information and bulletin boards (F12)
- 39. Improve signing (F13)
- 40. Add water delivery service to individual users (F4)
- 41. Add greywater/blackwater pumping service to individual users (F15)
- 42. Other (F16)
- 43. Add a toilet building(s) (F17)

## **G. Construct a New Area**

- 44. Construct a new site (G1)

## **H. Change Operator or Workforce**

- 45. Change to a concession operation [apply a 60% savings to O&M cost per operating day] (H1)
- 46. Operate through a partner agreement (e.g., local community, State agency, etc.) (H2)
- 47. Volunteer (increase use of volunteers at the site) (H3)
- 48. Contractor (begin or expand use of contracting) (H4)
- 49. Prison labor (begin or expand use of prison labor) (H5)
- 50. Other (H6)

## **I. Change Fees**

- 51. Eliminate fee (I1)
- 52. Reduce fee (I2)
- 53. Begin charging a fee (I3)
- 54. Increase current fee (I4)
- 55. Increase fee compliance efforts (I5)

## **J. Change Capacity (PAOT)**

- 56. Increase capacity (add a loop, build additional sites, add parking, etc.) (J1)
- 57. Reduce Capacity (i.e., close a loop, remove camp units, eliminate a parking area, etc.) (J2)

## **K. Site Conversion**

- 58. Change in Development Scale (K1)
- 59. Change in Site Type (K2)
- 60. Study feasibility of converting site from FA&O facility to recreation site (K3)

## **L. Replacement/Repair**

- 61. Replacement of an existing constructed feature that results in the reduction of Deferred Maintenance (L1)
- 62. Repair of an existing constructed feature that results in the reduction of Deferred Maintenance. (L2)
- 63. Conversion of constructed features to meet accessibility standards. (L3)

## **M. No Change (i.e., none of the above site-specific changes apply)**

- 64. No change – currently USFS operated (NC1)
- 65. No change – currently concession operation (NC2)
- 66. No change – currently operated by a partner under some other type of formal agreement (NC3)

*Note – A site can have more than one code*



## Appendix C. Sustainable Criteria Master List

**Note** – Considerations are forest conventions to help score the criteria.

### **SOCIAL**

**1. How well does the site contribute to the forest's recreation niche and goals?**

- 5 – Very well
- 3 - Moderately well
- 1 – Not very well

**2. What is the weighted occupancy percent for each recreation site? (Automatically Calculated)**

- 5 - Weighted average occupancy % is equal to or greater than 30%
- 3 - If weighted average occupancy % is equal to or greater than 15% but less than 30%
- 1 - If weighted average occupancy % is less than 15%

**3. Is this site a gateway to other recreation activities?**

- 5 - This site is < 1 mile from a highway/primary road/designated scenic byway, within 10 miles of a forest community, and /or provides access to multiple (5+) recreation activities.
- 3 - This site is < 3 miles off a highway/primary road/designated scenic byway, within 20 miles of a forest community, and/or provides access to 3-4 recreation activities.
- 1 - This site is > 3 miles from a highway/primary road/designated scenic byway or > 20 miles of a forest community, and/or provides access to 1-2 recreation activities.

*Consider: Community = Full Service; Primary Road = Mtc. Level 3 or higher and/or are part of the designated FLTP network; Provides access = the activity occurs adjacent to the site*

**4. To what extent is the recreation site's capacity accessible? (Automatically Calculated)**

- 5 – 50% or greater is accessible
- 3 – 25% to 50% is accessible
- 1 – less than 25% is accessible

## **ECONOMIC**

1. **How large is the gap between each recreation site's FCI and the FCI required to meet standard (0.900)?** (Automatically Calculated)
  - a. 5 - If FCI meets or exceeds 0.900
  - b. 4 - If FCI is equal to or greater than 0.890 but less than 0.900
  - c. 3 - If FCI is equal to or greater than 0.880 but less than 0.890
  - d. 2 - If FCI is equal to or greater than 0.850 but less than 0.880
  - e. 1 - If FCI is less than 0.850
2. **What is the potential to work with other agencies, concessionaires, partners or volunteer hosts to manage the site?**
  - a. 5 – Partnerships/volunteers are in place actively managing the site (i.e. concessionaire, hosts)
  - b. 3 - Partners/volunteers are used at site but could be expanded
  - c. 1 – Has potential for partnerships but nothing in place

*Consider: No potential partnerships = No Score*
3. **Is there a need to invest significant funding in this site within the next 5 years to prevent a partial or complete site closure?**
  - a. 5 - No, do not anticipate the need for significant funding
  - b. 3 – Possibly, some loops or features may need to be closed (e.g., a water system)
  - c. 1 – Yes, could not continue to operate site without investing significant funding
4. **Are there other providers or FS sites - that offer a similar opportunity/experience within a drive-time acceptable to users? (Note: acceptable drive time varies by facility type and development scale)**
  - a. 5 - There are no others OR the others are operating at full-capacity
  - b. 3 - There are others although they may be more distant and/or offer somewhat different opportunities
  - c. 1 - There are others that offer similar opportunities

## **ENVIRONMENTAL**

### **1. Is current visitor use causing unacceptable impacts to resources?**

- a. 5 – No, the site does not have unacceptable resource impacts (impacts have already been mitigated)
- b. 3 – Yes, there are some resource impacts but they could be mitigated with more investment
- c. 1 – Yes, impacts are difficult to mitigate

*Consider: Volume of trash and human waste; Staffing at a reasonable staffing level*

### **2. Does the site have a history of requiring mitigation for hazardous conditions, repeated replacement of features, or other safety risks?**

- a. 5 – No
- b. 3 – Yes, but there is no known history of personal injury or property damage
- c. 2 – Yes, and there are some characteristics of the site that increase the risk of damage
- d. 1 – Yes, and there is a known history of personal injury or property damage

*Consider: Rock fall, floods, landslides, vandalism, wildlife, (Refer to safety risk assessment)*

### **3. Is there potential to create significant adverse environmental, health, or safety impacts if this site is closed or decommissioned?**

- b. 5 - High potential - likely to create significant environmental, health, or safety issues
- c. 3 - Moderate impacts - impacts likely to occur; mitigation efforts likely needed and should be effective
- d. 1 - Little or no potential - any impacts would be minor and acceptable

### **4. Is site capacity being exceeded and causing resource damage?**

- a. 5 – No, there are no resource impacts or mitigation is in place
- b. 3 – Some of the time
- c. 1 – Yes all the time

*Consider: Capacity management defines where people can go. Keep people from negatively impacting the resource. No capacity issue? – 5*

## Appendix D. Remaining Allocated Funds

The NFRW Allocation comes from Congress and is intended to fund *operations* in the Recreation Sites Program. The CMFC Allocation comes from Congress and is intended to fund *maintenance* costs in the Recreation Sites Program. **Table D-1** identifies the allocation and subtracts the expected costs. Revenue from recreation site fees can be used at fee sites to supplement operations and maintenance or to reduce deferred maintenance. The Available Revenue indicated in the table is based on full implementation of the proposed new and increased site fees identified in this RFS. The Deferred Maintenance value is the sum remaining after full implementation of the 5-year action plan, without alternative funding. The expected overage in NFRW allocation can be applied to the shortfall in CMFC for maintenance costs or to deferred maintenance needs.

**Table D-1: Summary of recreation program funding versus operations and maintenance costs, following implementation of 5-year action plan including proposed new and raised site fees.**

CHANGED CONDITION SUMMARY (Revenues not applied to costs)	
NFRW ALLOCATION	281,615
OPERATIONS COSTS	209,029
NFRW BALANCE (Black) or SHORTFALL (Red)	72,586
CMFC ALLOCATION	38,451
MAINTENANCE COSTS	110,659
CMFC BALANCE (Black) or SHORTFALL (Red)	(72,208)
AVAILABLE REVENUE*	155,784
DEFERRED MAINTENANCE	2,839,577

\*Available Revenue estimate is based on implementation of the proposed new and changed recreation site fees.

### Remaining Allocated Funds by Site in Priority Order

**Table D-2** shows the results of applying fee revenue to a site's costs before using CMFC or NFRW funds, assuming implementation of all proposed site fees (proposed new fees indicated in blue). The cost for maintenance at each site is deducted from the available CMFC. The remaining CMFC column reduces as the maintenance cost is subtracted. The same occurs with the NFRW as the operations cost is subtracted. If a fee is collected at the site, the fees are applied first to the maintenance cost, thus using less CMFC. If the fees collected are more than the maintenance

cost, the fees are then applied to the operations cost, thus using less NFRW. When a site collects more fees than the operations and maintenance costs, the remaining fee is tracked and totaled in the chart. Unspent fee revenue remains available in future years to apply to fee site O&M or deferred maintenance needs.

**Table D-2: Recreation fund allocation and running balance with recreation sites prioritized by sustainable criteria score.** “Predicted Rec Fees \$” includes new day-use fees proposed in 2019 – if these fees are not implemented, the calculations of remaining revenue will differ, and the forest will be able to fund the annual maintenance of fewer recreation sites.

				<b>Final NFRW Funds Remaining</b>	\$142,767	<b>Final CMFC Funds Remaining</b>	(\$36,003)	<b>Revenue Remaining</b>	\$49,397
Mng Org	Site ID	Site Name	Score	Ops \$	Remainin g NFRW	Annual Maint.	Remainin g CMFC	Predicted Rec Fees \$	Revenue Remaining After O&M Costs
9080 2	27192	Little Grand Canyon TH	50	\$3,510	\$281,615	\$1,955	\$38,451	\$6,000	\$535
9080 2	34723	Oakwood Bottoms Greentree Reservoir Interpretive Site	50	\$1,830	\$279,785	\$3,500	\$34,951	\$0	\$0
9080 2	4812	Oakwood Viewing Blinds Wild/View	48	\$110	\$279,674	\$43	\$34,908	\$0	\$0
9080 2	34724	Snake Road North TH	48	\$476	\$279,198	\$61	\$34,847	\$0	\$0
9080 4	4814	Jackson Falls Access TH	48	\$4,359	\$274,839	\$418	\$34,429	\$0	\$0
9080 2	34725	Snake Road South TH	48	\$483	\$274,356	\$62	\$34,367	\$0	\$0
9080 4	26566	Millstone Bluff Interp Site	48	\$1,750	\$272,606	\$368	\$33,999	\$0	\$0
9080 4	18560-A	Garden Of The Gods Recreation Area Obs	48	\$42,186	\$272,606	\$4,294	\$33,999	\$60,000	\$13,520
9080 4	28226	Bell Smith Springs Interpretive Site	46	\$1,480	\$272,606	\$880	\$33,999	\$12,000	\$9,640



Mng Org	Site ID	Site Name	Score	Ops \$	Remainin g NFRW	Annual Maint.	Remainin g CMFC	Predicted Rec Fees \$	Revenue Remaining After O&M Costs
9080 2	34147	Pomona Boat Launch	46	\$2,733	\$272,606	\$571	\$33,999	\$15,000	\$11,696
9080 2	18600	Lincoln Memorial Picnic Area	46	\$14,820	\$257,786	\$9,459	\$24,540	\$0	\$0
9080 2	30315-F	Johnson Creek Deer Run TH	44	\$1,512	\$256,274	\$246	\$24,294	\$0	\$0
9080 4	18560-B	Pharaoh-Garden of The Gods CG	44	\$16,117	\$248,876	\$5,355	\$24,294	\$14,074	\$0
9080 2	18599	Pine Hills CG	44	\$3,740	\$245,136	\$2,666	\$24,178	\$2,550	\$0
9080 4	18581	Illinois Furnace Picnic Area	44	\$9,434	\$235,702	\$2,065	\$22,113	\$0	\$0
9080 4	18648	Redbud - Bell Smith Springs CG	44	\$47	\$235,655	\$2,056	\$20,057	\$0	\$0
9080 2	199	Turkey Bayou Camping Area	44	\$802	\$234,852	\$137	\$19,920	\$0	\$0
9080 4	18570-A	Pounds Hollow Lake Swim Area	44	\$23,927	\$213,358	\$7,567	\$19,920	\$10,000	\$0
9080 4	18570-B	Pine Ridge-Pounds Hollow CG	44	\$19,061	\$199,663	\$6,635	\$19,920	\$12,000	\$0
9080 4	18641-A	Lake Glendale Beach Swim Area	44	\$32	\$199,631	\$5,000	\$14,920	\$0	\$0
9080 4	18641-C	Cardinal Bay - Lake Glendale Boating Site	43	\$0	\$199,631	\$1,465	\$13,454	\$0	\$0
9080 2	30315-C	Johnson Creek Boating Site	43	\$3,754	\$199,631	\$2,238	\$13,454	\$20,000	\$14,007
9080 4	4810	Burden Falls Access TH	42	\$16	\$199,615	\$10	\$13,444	\$0	\$0
9080 4	4836	Trigg Tower TH	42	\$1,233	\$198,382	\$52	\$13,392	\$0	\$0

## Shawnee National Forest

Mng Org	Site ID	Site Name	Score	Ops \$	Remainin g NFRW	Annual Maint.	Remainin g CMFC	Predicted Rec Fees \$	Revenue Remaining After O&M Costs
9080 2	4806	Kaolin Pond Fishing Site	42	\$817	\$197,565	\$90	\$13,302	\$0	\$0
9080 2	30315-E	Johnson Creek - Primitive Camping Area	42	\$151	\$197,414	\$114	\$13,188	\$0	\$0
9080 4	4825	Dutchman Lake Rec Area Fishing Site	42	\$2,067	\$195,347	\$195	\$12,993	\$0	\$0
9080 4	18641-F	Duck Bay - Lake Glendale Group CG	42	\$153	\$195,194	\$3,500	\$9,493	\$0	\$0
9080 4	18641-D	Goose Bay - Lake Glendale Group Picnic Area	42	\$500	\$194,694	\$3,500	\$5,993	\$0	\$0
9080 4	18641-B	Pine Point - Lake Glendale Picnic Area	42	\$105	\$194,589	\$1,500	\$4,493	\$0	\$0
9080 2	34141	Buttermilk Hill Picnic Area Picnic Area	41	\$7,609	\$186,980	\$2,281	\$2,212	\$0	\$0
9080 4	4831	Jackson Falls Climbing Area	41	\$1,364	\$185,616	\$0	\$2,212	\$0	\$0
9080 2	30350	Big Muddy Wetlands TH	40	\$0	\$185,616	\$53	\$2,159	\$0	\$0
9080 4	30343	Dutchman Lake TH	40	\$0	\$185,616	\$2	\$2,157	\$0	\$0
9080 2	18621	Mccann Springs TH	40	\$564	\$185,051	\$12	\$2,145	\$0	\$0
9080 4	30337	East Trigg TH	40	\$390	\$184,662	\$56	\$2,089	\$0	\$0
9080 2	4830	Godwin Trailhead-East TH	40	\$75	\$184,587	\$70	\$2,019	\$0	\$0
9080 4	30324	Millstone Lake Fishing Site	40	\$0	\$184,587	\$84	\$1,935	\$0	\$0

Mng Org	Site ID	Site Name	Score	Ops \$	Remainin g NFRW	Annual Maint.	Remainin g CMFC	Predicted Rec Fees \$	Revenue Remaining After O&M Costs
9080 2	30344	Oakwood Rr Pond Fishing Site	40	\$0	\$184,587	\$2	\$1,932	\$0	\$0
9080 2	30362	Panther Den TH	40	\$0	\$184,587	\$6	\$1,926	\$0	\$0
9080 4	30327	Turpin Pond Fishing Site	40	\$0	\$184,587	\$55	\$1,871	\$0	\$0
9080 2	18601	Upper McGee Hill Picnic Area	40	\$924	\$183,663	\$444	\$1,427	\$0	\$0
9080 4	18582	Rim Rock (Indian Wall) Picnic Area	40	\$6,559	\$177,104	\$2,860	(\$1,432)	\$0	\$0
9080 4	30331	Pennant Bar Openlands TH	40	\$0	\$177,104	\$110	(\$1,542)	\$0	\$0
9080 4	18641-E	Oak Point - Lake Glendale CG	40	\$341	\$176,763	\$16,599	(\$18,142)	\$0	\$0
9080 2	30357	Godwin Trailhead West TH	38	\$0	\$176,763	\$11	(\$18,153)	\$0	\$0
9080 2	30348	Oakwood Bottoms Road TH	38	\$0	\$176,763	\$55	(\$18,208)	\$0	\$0
9080 4	30326	Pennant Bar Ponds Fishing Site	38	\$0	\$176,763	\$3,134	(\$21,341)	\$0	\$0
9080 4	30330	Sheepbarn Pond Fishing Site	38	\$0	\$176,763	\$104	(\$21,446)	\$0	\$0
9080 4	30342	High Knob TH	38	\$840	\$175,923	\$7	(\$21,453)	\$0	\$0
9080 2	30349	Oakwood Bottoms Otterslough TH	38	\$0	\$175,923	\$53	(\$21,506)	\$0	\$0
9080 4	30325	Turkey Farm Pond Fishing Site	38	\$0	\$175,923	\$147	(\$21,653)	\$0	\$0
9080 2	30353	Water Fall TH	38	\$0	\$175,923	\$60	(\$21,712)	\$0	\$0
9080 4	18557	High Knob Observation Site	38	\$3,425	\$172,498	\$544	(\$22,256)	\$0	\$0

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Mng Org	Site ID	Site Name	Score	Ops \$	Remainin g NFRW	Annual Maint.	Remainin g CMFC	Predicted Rec Fees \$	Revenue Remaining After O&M Costs
9080 4	30332	Ashby Openlands TH	38	\$0	\$172,498	\$55	(\$22,311)	\$0	\$0
9080 2	30352	Bluff Lakes TH	38	\$0	\$172,498	\$55	(\$22,366)	\$0	\$0
9080 2	30351	Sexton Creek Wetlands TH	38	\$0	\$172,498	\$53	(\$22,418)	\$0	\$0
9080 4	30333	Turpin Openlands TH	38	\$0	\$172,498	\$55	(\$22,473)	\$0	\$0
9080 4	18576	Tower Rock CG	38	\$400	\$172,098	\$636	(\$23,110)	\$0	\$0
9080 4	4809	Indian Kitchen Trailhead TH	38	\$2,149	\$169,949	\$260	(\$23,369)	\$0	\$0
9080 4	4850	Lusk Creek Trailhead TH	38	\$1,064	\$168,885	\$369	(\$23,738)	\$0	\$0
9080 2	18624	Winters Pond Picnic Area	38	\$352	\$168,533	\$9	(\$23,747)	\$0	\$0
9080 4	22707	Hickory Point - Lake Of Egypt Boating Site	38	\$850	\$167,683	\$14	(\$23,761)	\$0	\$0
9080 2	18622	Government Rock Observation Site	36	\$25	\$167,658	\$28	(\$23,789)	\$0	\$0
9080 2	30356	White Pine TH	36	\$0	\$167,658	\$11	(\$23,800)	\$0	\$0
9080 2	18592	Saddle Hill Observation Site	36	\$311	\$167,347	\$66	(\$23,866)	\$0	\$0
9080 4	30338	Beaver Trail TH	36	\$0	\$167,347	\$4	(\$23,870)	\$0	\$0
9080 2	30360	Horse Creek TH	36	\$0	\$167,347	\$5	(\$23,875)	\$0	\$0
9080 2	18593	Lower Mcgee Hill Observation Site	36	\$159	\$167,188	\$1	(\$23,876)	\$0	\$0

Mng Org	Site ID	Site Name	Score	Ops \$	Remainin g NFRW	Annual Maint.	Remainin g CMFC	Predicted Rec Fees \$	Revenue Remaining After O&M Costs
9080 4	4823	Little Cache Boatramp	36	\$89	\$167,100	\$0	(\$23,876)	\$0	\$0
9080 2	30359	Rowan Cemetary TH	36	\$0	\$167,100	\$4	(\$23,880)	\$0	\$0
9080 4	4804	One Horse Gap Fishing Site	36	\$57	\$167,043	\$69	(\$23,949)	\$0	\$0
9080 4	30321	Airstrip Pond Fishing Site	36	\$0	\$167,043	\$57	(\$24,006)	\$0	\$0
9080 4	30322	Forestry Pond Fishing Site	36	\$0	\$167,043	\$57	(\$24,063)	\$0	\$0
9080 2	4818	Hidden Cove TH	36	\$168	\$166,875	\$5	(\$24,067)	\$0	\$0
9080 2	4807	Howardton Access TH	36	\$25	\$166,850	\$102	(\$24,170)	\$0	\$0
9080 2	30361	Ripple Hollow TH	36	\$0	\$166,850	\$49	(\$24,219)	\$0	\$0
9080 2	18613	Big Muddy River Boating Site	36	\$347	\$166,503	\$350	(\$24,569)	\$0	\$0
9080 2	4820	Buttermilk Hill TH	36	\$25	\$166,478	\$1,027	(\$25,596)	\$0	\$0
9080 2	18608	Inspiration Point TH	36	\$574	\$165,904	\$8	(\$25,603)	\$0	\$0
9080 4	30329	Lost Pond Fishing Site	36	\$0	\$165,904	\$105	(\$25,708)	\$0	\$0
9080 2	30355	Gum Ridge TH	36	\$0	\$165,904	\$152	(\$25,860)	\$0	\$0
9080 4	18653	Hunting Branch - Bell Smith Springs TH	36	\$17	\$165,888	\$335	(\$26,196)	\$0	\$0
9080 4	18577	Camp Cadiz CG	36	\$2,894	\$162,994	\$2,497	(\$26,554)	\$2,139	\$0
9080 4	30339	Hitching Post TH	36	\$687	\$162,306	\$186	(\$26,739)	\$0	\$0

## Shawnee National Forest

Mng Org	Site ID	Site Name	Score	Ops \$	Remainin g NFRW	Annual Maint.	Remainin g CMFC	Predicted Rec Fees \$	Revenue Remaining After O&M Costs
9080 2	18619	Pomona Natural Bridge TH	36	\$622	\$161,684	\$208	(\$26,947)	\$0	\$0
9080 4	18560-C	Pharaoh-Garden Of The Gods Picnic Area	36	\$7,874	\$153,811	\$2,052	(\$29,000)	\$0	\$0
9080 2	30315-A	Johnson Creek CG	36	\$4,992	\$148,818	\$4,524	(\$31,503)	\$2,020	\$0
9080 4	30340	Hunting Branch Picnic Area	35	\$1	\$148,817	\$100	(\$31,603)	\$0	\$0
9080 4	4826	Lake Tecumseh Rec Area Fishing Site	35	\$1,657	\$147,160	\$55	(\$31,658)	\$0	\$0
9080 4	18559	Tower Rock Observation Site	35	\$57	\$147,102	\$0	(\$31,658)	\$0	\$0
9080 4	26552	Saline Springs Documentar y Site	34	\$57	\$147,045	\$0	(\$31,658)	\$0	\$0
9080 2	4828	Pomona Road Trailhead TH	34	\$315	\$146,730	\$10	(\$31,669)	\$0	\$0
9080 2	30358	Bald Knob South TH	34	\$0	\$146,730	\$4	(\$31,673)	\$0	\$0
9080 2	4821	Cove Hollow Trailhead TH	34	\$609	\$146,122	\$30	(\$31,703)	\$0	\$0
9080 2	29024	Crooked Tree Observation Site	32	\$312	\$145,810	\$79	(\$31,781)	\$0	\$0
9080 2	18607	Old Trail Point Observation Site	32	\$223	\$145,587	\$5	(\$31,786)	\$0	\$0
9080 2	4805	Bean Ridge Pond Fishing Site	32	\$987	\$144,599	\$127	(\$31,913)	\$0	\$0
9080 2	30315-B	Johnson Creek Picnic Area	32	\$1,783	\$142,817	\$4,083	(\$35,995)	\$0	\$0
9080 2	4817	Black Pond WL Parking Wild/View	31	\$25	\$142,792	\$0	(\$35,995)	\$0	\$0



Mng Org	Site ID	Site Name	Score	Ops \$	Remainin g NFRW	Annual Maint.	Remainin g CMFC	Predicted Rec Fees \$	Revenue Remaining After O&M Costs
9080 2	34132	Sharp Rock Falls Boating Site	30	\$25	\$142,767	\$8	(\$36,003)	\$0	\$0
9080 4	4822	Stoneface Trailhead TH	0	\$0	\$142,767	\$0	(\$36,003)	\$0	\$0
9080 4	18649	Teal Pond Fishing Site	0	\$0	\$142,767	\$0	(\$36,003)	\$0	\$0
9080 4	18585	Tower Rock Picnic Area	0	\$0	\$142,767	\$0	(\$36,003)	\$0	\$0
9080 4	4829	Whoopie Cat Lake Fishing Site	0	\$0	\$142,767	\$0	(\$36,003)	\$0	\$0

## Appendix E. Investment Priorities to Reduce Deferred Maintenance

RSA ANALYSIS Investment Priorities to Reduce DM			
		Investment Total	\$2,415,000
PROJECT/SITE NAME	SCOPE OF PROJECT	COST	PRIORITY #
DUCK BAY - LAKE GLENDALE	Replace 1 toilet building (4 fixtures, running water) and repair historic shelter. Completion of work subject to outside funding.	\$200,000	1*
GOOSE BAY - LAKE GLENDALE	Replace 1 toilet building (6 fixtures, running water) and repair historic shelter. Completion of work subject to outside funding.	\$350,000	1*
LAKE GLENDALE BEACH	Replace the existing beach house. Work dependent on other funding.	\$500,000	1*
OAK POINT - LAKE GLENDALE	Refurbish 1 shower house, replace 1 shower house, and add electricity to current non-electric sites. Completion of work dependent on outside funding.	\$800,000	1*
PINE POINT - LAKE GLENDALE	Replace existing toilet with CXT. Dependent on outside funding.	\$40,000	1*
PINE HILLS	Add a pavilion with picnic tables, replace tables, lantern posts, gravel pads and fire rings in camp sites, lengthen season to year-round. Already funded from FDDS @ \$60K.	\$60,000	2
PINE RIDGE-POUNDS HOLLOW	1. Improve road in electrified loop for site access for RVs. 2. Add dump station and water hook-ups to existing electric sites. Second phase dependent on other funding. Propose fee increase for electric sites.	\$165,000	3
OAKWOOD BOTTOMS GREENTREE RESERVOIR INTERPRETIVE	Install new CXT, repair boardwalk and shelter. Work with partners to repair fishing piers approximately \$15K contribution. Alternative funding needed.	\$55,000	4
TRIGG TOWER	Sand-blast and paint fire tower. Work depends on other support.	\$100,000	5
GARDEN OF THE GODS RECREATION AREA	Repair the flagstone trail, increase volunteers at the site. Outside funding needed to fully refurbish trail. Investigate adding a day use fee to the Observation Trail site.	\$100,000	6
JACKSON FALLS ACCESS	Replace existing toilets with stick-built because a CXT cannot be placed at this site. Add gravel to parking area. Must be funded from alternative source.	\$45,000	7
All are considered #1 priority together, may be phased if funding is packaged to resolve the issues within upcoming 5 years.			1* Lake Glendale Concession sites